State of California

EMPLOYMENT TRAINING PANEL

M e m o r a n d u m

To: Panel Members Date: September 22, 2006

From: Creighton Chan, Manager Analyst: D. Woodside

Subject: One-Step Agreement for **NATIONAL SEMICONDUCTOR CORPORATION**

CONTRACTOR:

- Training Project Profile: Retraining: Companies W/Out-Of-State Competition
- Legislative Priorities: Stimulating Exports/Imports
  Moving To A High Performance Workplace
  Promotion Of California's Manufacturing Workforce
- Type of Industry: Manufacturing Electronics/Semiconductors
- Repeat Contractor: No
- Contractor's Full-Time Employees
  - *Worldwide:* 9,000
  - *In California*: 1,900
- ETP Trainees Represented by Union: No
- Name and Local Number of Union Representing ETP Trainees: N/A

CONTRACT:

- Program Costs: $1,998,000
- Substantial Contribution: $0
- Total ETP Funding: $1,998,000
- Total In-kind Contribution: $3,047,178
  - *Trainee Wages Paid During Training:* $3,047,178
  - *Other Contributions:* $0
- Reimbursement Method: Fixed-Fee
- County(ies) Served: Santa Clara, Nevada, San Diego, Los Angeles

INTRODUCTION:

Founded in 1959, National Semiconductor Corporation (National Semiconductor), headquartered in Santa Clara, designs, develops, manufactures and markets a wide range of semiconductor products, most of which are analog or mixed-signal integrated circuits. The company's analog-intensive solutions provide more energy efficiency, precision, portability, better audio, and sharper images in electronics systems. Analog technologies link the digital world and the world of light, sound, temperature, speed, and pressure. National Semiconductor's products feature audio and operational amplifiers, interface technologies, data converters, and power management solutions. Applications for these products include cellular handsets, video displays, and electronics used in medical, automotive, and test and measurement devices. The company currently employs 1,900 Californians on a full-time basis. This project will fund retraining of workers in Santa Clara, Grass Valley, Calabasas, and San Diego.

National Semiconductor operates in a global market and faces significant off-shore competition. The company reports an investment of over $325 million in research and development in FY 2006, designed to expand its portfolio of products and stimulate exports. The company is eligible for ETP funding under Title 22 California Code of Regulations, Section 4416(b) because it is a manufacturer.

The overall objective of the training plan is to re-tool the existing workforce by building new knowledge relative to analog semiconductor manufacturing and transforming its product portfolio from a vertical to a broad market focus. Last fiscal year, National Semiconductor reports, it introduced 75 new products. Rapid and voluminous product development along with increasing sophistication and technology place a heavy burden on worker proficiency. Under this proposal, National Semiconductor will deliver class/laboratory and computer-based training to expand 1,500 employees' skills in advanced technology, computer, continuous improvement, and management so these California workers gain the expertise to better identify customer needs, innovate and develop new technologies, and provide services and applications using emerging technology.

MEETING ETP GOALS AND OBJECTIVES:

National Semiconductor proposes training that will further the following ETP goals and objectives:

1) National Semiconductor customers are located throughout the world resulting in over 50 percent of its sales coming from off-shore customers. This proposal will fund training in support of California's economic growth by stimulating exports.

2) By receiving complex job skills training, National Semiconductor's California employees will be able to improve productivity and quality even as the company develops an expanding portfolio of products and must find a way to commercialize new technologies rapidly.

3) These efforts including retraining, product research and development, and the use of the principles of a high performance workplace, will foster the creation and retention of high-wage, high-skilled jobs at this company and in California.

TRAINING PLAN TABLE:

Grp/Trainee Type	Types Of Training	No. Trainees to Retain	No. Class/Lab Videocnf. Hrs.	No. CBT Hrs.	Average Cost Per Trainee	Hourly Wage After 90 Days
Job Number 1 Retrainees	MENU: Advanced Technology Continuous Improvement Computer Skills Business Skills Management Skills	1,500	24 - 200	0 - 80	$1,332	$13.87 - $75.50

Wages After 90-Day Retention

Occupation		
Administrative Staff Customer Service Representative Operations Technician Sales/Marketing Representative Engineer Operations Manager Finance Representative Software Developer		
Health Benefits Used To Meet ETP Minimum Wage: Although the company pays health benefits for trainees, the hourly contribution is not being used to meet ETP minimum wage requirements.	**Turnover Rate** 8.1%	**% Of Mgrs & Supervisors To Be Trained:** 10%

Other Employee Benefits: Employer paid benefits includes paid time-off; vision, dental, and medical insurance; group life term and disability insurance; employee assistance programs including tuition reimbursement, adoption assistance, and retirement accounts; and retirement planning including 401 K and employee stock purchase plans.

COMMENTS / ISSUES:

- ***Frontline Workers***

  All participants in this project meet the Panel definition of frontline workers under Title 22 California Code of Regulations Section 4400(ee) except for 150 operations managers.

- ***Production During Training***

  The proposed Contractor agrees that during ETP-funded training hours, trainees will not produce products or provide services which will ultimately be sold.

COMMENTS / ISSUES: (continued)

Advanced Technology Reimbursement Rate

National Semiconductor is requesting the Advanced Technology (AT) hourly reimbursement rate of $26 to deliver training in two critical areas. The first area is computer skills for information technology (IT) engineers and software developers to build applications in the company's software systems including network infrastructure, firewall and security development, related computer program engineering, factory automation and developmental systems software related to semiconductor technology. Second, AT training will include courses for engineers, technicians, and operations managers in semiconductor manufacturing technology including CMOS (complementary-symmetry/metal-oxide semiconductor is a major class of integrated circuits) and charge-coupled imaging sensors, digital oscilloscopes, signal integrity, electron optics functionality, and intraocular retinal prosthesis.

According to National Semiconductor representatives, AT courses will be taught by a combination of external vendors and highly-compensated internal engineers at an estimated cost of over $5,000 per day of training. The company agrees to the maximum ratio of 10 trainees per instructor which will create the best learning environment for this training. Less than half of the total trainee population will receive AT training and only approximately 50 select engineers, operations technicians, software developers, and managers may receive up to 200 class/lab hours. Because of the sophisticated specifications, highly technical processes, advanced software applications, and high cost to deliver the training, Panel staff recommends that the company receive the AT reimbursement rate for this training.

RECOMMENDATION:

Staff recommends that the Panel approve this proposal because the training would help a "target industry" company to remain competitive in a global market, and retain jobs with good wages and career opportunities.

NARRATIVE:

In addition to the AT training outlined above, the proposed ETP-funded training includes the following:

Continuous Improvement: According to company representatives, the rapid increase in the introduction of new semiconductor technology puts increasing pressure to improve product design cycles, reduce factory ramp time, and increase product quality. National Semiconductor's goal in fiscal year 2007 will be to build on the success of its continuous improvement program by implementing the next stages of its quality measurement and analysis processes and tools. National Semiconductor intends to utilize this quality data to implement corrective action and to expand its best known methods for engineering and manufacturing. All employees with any line or design function will receive training in continuous improvement skills including Six Sigma training.

Computer Skills: Trainees must be trained on a variety of corporate systems ranging from desktop applications such as advanced levels of Java, C++, and visual basic applications to its in-house business computer applications for inventory, account management, and manufacturing control. Training will also cover the implementation of an upgraded enterprise resource planning

NARRATIVE: (continued)

(ERP/SAP) system for all employees since, in one aspect or another, all workers will use the upgraded ERP system. Only advanced training in the company's eBusiness systems will be provided under Advanced Technology training.

Business Skills: Many of National Semiconductor employees currently lack the business skills needed to continue the company's successful introduction of new semiconductor technologies. These skills include: how to manage projects, develop new business, reduce costs, and prepare effective oral and written presentations to customers. Worldwide operations, including the complexity of its products and business transactions, dictate that on-time delivery and order accuracy must also be achieved. The proposed business skills training will improve the company's service, delivery time, and order accuracy. Product knowledge and marketing techniques training will also be delivered to selected employees to better market the company's many new products to its worldwide customers.

Management Skills: According to company representatives, National Semiconductor's practice has been to promote existing employees, mostly engineers and technical staff, into management positions. These operations managers need to better support and communicate with their staff. Training will provide newly-promoted managers with leadership, coaching, facilitation, and conflict management skills that are consistent with the Panel's support of the high performance workplace. National Semiconductor will provide basic supervisory training to all new managers outside of the ETP contract and at its own cost.

Commitment to Training

The proposed customized ETP curriculum will build on, but not overlap, basic instruction and orientation training all ready provided by National Semiconductor. According to its written statement, the company currently funds all training in OSHA-mandated safety regulations, sexual harassment prevention, new hire orientation, rudimentary job skills, basic desktop application training in Microsoft Word, Excel, and PowerPoint, and executive development programs. In addition, all on-the-job training and training for employees not eligible for training under ETP is provided by National Semiconductor at its own expense. National Semiconductor's current training budget for California non-ETP related training is $958,939.

Further, the proposed ETP-funded training is different in content and format than the company's on-going training. The classroom/laboratory training outlined in this proposal will focus on a variety of new technologies to enhance product innovation and provide semiconductor solutions for the next generation of consumer applications. This will enable National Semiconductor to compete for new customers on a global basis and expand its market.

Following this ETP funded project, National Semiconductor will continue to develop and maintain its on-going training programs pertaining to changes in its product lines to ensure employees acquire the requisite skills. Additionally, all future training will be designed to address the broadening gap between the availability of skilled workers and the employee performance requirements of the modern, high performance workplace.

SUBCONTRACTORS:

Herrera & Company of Stockton, California, will provide ETP administrative services for the Contractor in connection with this proposal. By contractual arrangement between National Semiconductor and Herrera & Company, ETP funds will be used to pay for said services which in no event shall exceed 13 percent of payment earned. California-based training vendors are to be determined.

THIRD PARTY SERVICES:

Herrera & Company assisted with the completion of the application documents for a flat fee of $20,000.

National Semiconductor Corporation

MENU CURRICULUM

Class/Lab Hours
24 – 200

Trainees will receive any of the following:

Computer Skills:

Customer Relationship Management Software
Supply Chain Management Application
eBusiness Applications
Advanced Desktop Applications Software

Continuous Improvement:

Process Mapping and Measurement Training
Design of Experiments/Manufacturability for Engineers
Six Sigma
Failure, Tolerance and Yield Analysis and Design
Semiconductor Reliability
Designing Semiconductors for Reliability and Improved Yields
Process Improvement Training
Problem Solving Tools and Techniques

Business Skills:

Customer Communication and Awareness
Market Validation and Decision Modeling
Customer Service Relationship Buildings
Semiconductor Memories Fundamentals
Sales and Negotiation Skills
Product Marketing for Engineers
Finance and Accounting Skills
Marketing Promotion and Position
Advanced Computer Based Decision Models

Management Skills:

Change Management Skills
Leadership and Coaching Skills
Project, Performance and Meeting Management
Dynamics of Managing
Managing for Effective Meetings
Technical Business and Finance Management

Advanced Technology Skills

Factory Automation Tools and Techniques
Advanced .Net Software Applications
System Data Modeling and Architecture
Networking Design, Implementation, Maintenance, and Security
Advanced Programming Development Applications
Verilog Coding for Hardware Designers
MyBase Applications, Manufacturing, and Yield Solutions
CMOS and Charge-Coupled Imaging Sensors and Applications
Digital Oscilloscopes
Fundamentals of Signal Integrity
High Speed Board Design
Materials Conventions and Applications
Electron Optics Functionality
Intraocular Retinal Prosthesis

National Semiconductor Corporation

MENU CURRICULUM (continued)

CBT Hours
0 – 80

Trainees will receive any of the following:

COMPUTER-BASED TRAINING (CBT)

Computer Skills:
eBusiness Applications (8 hours)
Desktop Applications Software (12 hours)
Internal Customer Applications (6 hours)

Business Skills:
Customer Communications and Awareness (4 hours)
Product Knowledge (8 hours)
Accounting and Finance (2 hours)
Sales and Negotiation Skills (10 hours)

Management Skills:
Change Management Skills (2 hours)
Leadership and Coaching Skills (8 hours)
Project Management (2 hours)
Team Development and Leadership (4 hours)
Managing for Effective Meetings (8 hours)

Continuous Improvement:
eBusiness Applications (6 hours)
Advanced Desktop Applications Software (4 hours)
Process Improvement (8 hours)
Six Sigma (2 hours)
Quality Control and Standard Operating Procedures (8 hours)

Comment: The parties agree that the training identified in this Curriculum may be revised from time-to-time during the term of this Agreement at the request of Contractor and with the prior written approval of ETP. (See also Section 12 in this Agreement.)